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Valentine Area Skills Gap Report
Final Report

Prepared for the Nebraska Department of Labor

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Executive Summary

In recent months, the Nebraska Department of Labor has led efforts to conduct two surveys regarding the skills of workers and skill needs of employers in the Valentine area. The surveys were conducted during late 2018 and early 2019. The Valentine area includes all or most of Blaine, Brown, Cherry, Grant, Hooker, Keya Paha, and Thomas counties in Nebraska and Todd and Tripp Counties in South Dakota as well as a portion of eastern Garden and Sheridan counties in Nebraska**.** The two surveys are the *Valentine Area Labor Availability Survey* and the *Valentine Area Survey of Hiring and Training Needs*.

The current study utilizes the results of both surveys as well as secondary data about the Valentine area to summarize information about job skills and whether a local skills gap is present. A skills gap is present if it is difficult for a large share of employers to hire in a particular occupation and there is also a persistent gap between the demand for new workers and the number of individuals entering that occupation. Key questions include: In what part of the labor force, if any, is a skills gap present? And, is the skills gap the result of a lack of education and training opportunities, or are other factors at work?

Results of the study suggest that over the next decade the annual flow of individuals into the workforce in the Valentine area will lag the projected annual job openings due to net job growth and worker replacement. This annual deficit is partly due to significant outmigration from the region. Larger deficits are found among teachers, health care practitioners, farm workers, office and administrative support workers and sales and related workers. For teachers and health care practitioners, efforts should be made to further expand on-line course opportunities so that students can earn degrees while living in the region. The state of Nebraska also can establish and expand incentive programs for students in these occupations to return to the region after receiving their degree.

Among service and blue collar occupations, these annual deficits also can arise because a significant share workers are difficult to hire due to a “poor work history,” which typically means frequent job changes. There appears to be a large group of applicants who have some or all of the relevant occupation-specific skills, but who are still not appealing to employers due to a poor work history or an inability to pass a background check. This raises two key questions: is there a subset of workers in these occupations with potential to change, that is, to become more committed to and a better team member at work? And, how would workers who are able to change be identified? To answer these questions, there should be extensive discussion with human resources representatives and direct supervisors of workers regarding practical steps workers can take, if any, over time to change a poor work history into a good work history.

For all skilled blue collar occupations such as construction and extraction, production, and installation, maintenance and repair**,** potential employees can be prepared through enhanced training, education, internship and apprenticeship opportunities developed through collaboration between employers, training entities and other education institutions. State government and local organizations also can participate by sharing the cost of these activities with employers.

A list of specific skilled occupations is below, along with the standard occupation code. The last chapter of this report provides detailed analysis for these occupations.

Licensed Practical and Licensed Vocational Nurses (SOC CODE 29-2061)
Agricultural Equipment Operators (SOC CODE 45-2091)
Farmworkers, Farm, Ranch and Aquaculture Animals (SOC CODE 45-2093)
Welders, Cutters, Solderers and Brazers (SOC CODE 51-4121)
Heavy and Tractor-Trailer Truck Drivers (SOC CODE 53-3032)

In addition, analysis did not find that the level of wages in the Valentine area is a significant challenge for hiring among the existing workforce. Specifically, in many occupation groups, the wage requirements of individuals seeking work: 1) represent only a moderate increase over their current wage and 2) are within the prevailing wages found in the Valentine area labor market. Evidence of a wage-based skills-gap is found in just two occupation groups, managers and health care support workers. Wage levels in the Valentine area, however, may be an issue for attracting workers from outside the region.

Many employers also are concerned that about the potential loss of skill and experience due to the retirement of workers over the next 5 years, including 28.3 percent who are very concerned. About one-third of employers are taking steps to address potential skills gaps due to upcoming retirements. Notably, 9.3 percent of employers are hiring workers with the lost skills. However, a more common approach is to utilize existing workers. Forty-four percent of employers are providing training or on-the-job mentoring to current or new workers and 13.0 percent are retaining retiring workers on a part-time basis.

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1. Introduction

The Nebraska Departments of Labor and Economic Development led efforts during late 2018 and early 2019 to survey both households and businesses in the Valentine area. Surveys were designed to examine the skills and work preferences of regional residents and the skill needs and training practices of local employers. These surveys were the *Valentine Area Labor Availability Survey* and the *Valentine Area Survey of Hiring and Training Needs*. Results of the surveys can be used to assess the demand for and supply of labor in the Valentine area, which includes all or most of Blaine, Brown, Cherry, Grant, Hooker Keya Paha, and Thomas counties in Nebraska and Todd and Tripp Counties in South Dakota as well as a portion of eastern Garden and Sheridan counties in Nebraska**.**

Survey results yield detailed information about the skills of the local workforce and the hiring and training activities of area businesses. These results provide significant insight into whether there are skills gaps present in individual occupations within the Valentine area labor market. Such skills gaps are present if a high share of employers find that it is difficult to hire workers for an occupation and there is a persistent gap between the demand for workers and the number of workers entering the occupation.

Survey results also indicate that skills gaps have potential to limit growth of the Valentine area economy. In particular, a large percent of respondents to the *Valentine Area Survey of Hiring and Training Needs* indicate that labor availability would be an issue if they were asked to consider a local expansion.

Measuring the skills gap is challenging. After all, both businesses and workers are likely to cite difficulties in the labor market with some frequency. For employers, finding and maintaining a productive work force is one of the key challenges of running a business. Likewise, finding and keeping meaningful employment is one of the key career challenges faced by workers. Sure enough, results from the *Valentine Area Labor Availability Survey* indicate that 73.4 percent of Valentine area job seekers find that a lack of local job opportunities is an obstacle to finding new employment. At the same time, 83.4 percent of Valentine area employers responding to the *Valentine Area Survey of Hiring and Training Needs* Indicate that it is difficult to hire workers.

Do these survey responses mean that a broad-based skills gap is present in the Valentine area economy? Not necessarily. After all, as noted above, we would anticipate a certain level of concern by businesses and people given the rigor of the labor market. A more interesting question is: for which occupations is it most difficult to find a worker, or to find a job? Further, to identify a skills gap in a particular occupation, we also must identify factors which are causing a lingering shortfall in the number of qualified and employable workers available to employers.

There a many potential reasons why a skills gap could develop within an occupation.

Structural change – Structural change refers to changes in technology, customer demand, or international competition which expand the demand for workers in select occupations (and reduce the demand in others). Time may be required for workers to prepare for these emerging occupations, either through retraining for existing workers or by providing appropriate degree and certificate programs for college, community college and high school students.

Education and Training Programs – Appropriate degree and certificate programs are needed to help workers build the skills required in the economy. Local education institutions, many of which are part of

the public sector, may struggle to identify needed programs or change program offerings to meet the needs of students and employers. Degree and certificate programs also must be sufficiently rigorous to prepare students to meet employer needs.

Appeal of Occupations – Even when adequate degree and training programs are available, occupations may fail to attract workers at prevailing wages. The combination of wages, benefits and working conditions in a particular occupation may fail to attract workers relative to other work options available within the economy. Such conditions can arise or grow worse as the economy evolves and can also occur because potential workers have inadequate information about the benefits of a particular occupation, or are steered away from an occupation by family members, mentors, or public perception. At the same time, competitive conditions may prevent local employers from raising pay and benefits in order to enhance the appeal of a particular occupation.

Taxes on Middle Class Workers – At prevailing wages, taxes may discourage workers from making investments in their skills through education and training programs. Such monetary and time investments may not be appealing if too large a share of incremental earnings go to federal, state and local government (either directly through income taxes or indirectly through sales and property taxes). In other words, if the tax burden is too high, workers may not choose to enter skilled occupations where work opportunities are abundant, even when local education and training opportunities are adequate.

Career Destruction – A portion of workers at all skill levels may engage in behavior which reduces their employment potential. These workers may have adequate skill and experience for an occupation, but still not appeal to employers. For example, worker may have a criminal record, or fail to pass a drug test or may have a poor work history, as evidenced by frequent job changes or other indicators of an inability to fit into the workplace. In these cases, a skill gap can arise because worker skills cannot or will not be utilized by employers, rather than a lack of skill.

Social Safety Net – Public benefits such as Medicaid, TANF or Social Security Disability Income may create a significant disincentive for some workers, particularly lower skills workers, to fully participate in the workforce. This may make it very challenging for employers in some occupations to find an adequate workforce.

Net Outmigration – While workers are constantly moving in and out of cities, some cities develop a pattern of sustained net outmigration of workers (the difference between in-migrants and out-migrants) in a wide variety of occupations. Net outmigration may be especially severe in those skilled occupations which are typically filled by younger workers (for example, computer and mathematical occupations), given that younger, educated workers are also the most mobile.

These phenomena can limit the local supply of workers in selected skill groups, leaving employers to note a lack of adequately trained workers, or workers who have a poor work history or wage demands which are too high. This report will utilize data from a variety of sources to identify where a skills gap may be present, including data from the Valentine *Area Labor Availability Survey*, the *Valentine Area Survey of Hiring and Training Needs*, and data on projected job openings, the flow of graduates and prevailing wages. We began by comparing the annual job openings generated in each occupation, due to net job growth or the replacement of workers, with the potential annual supply of new workers in each occupation due to local graduates and net migration.

We also consider the share of existing employed workers who are open to or pursuing a change in jobs, and compare their wage requirements with prevailing market wages. Such “churn” in the labor market is important to provide employers with the best match of experienced, skilled workers.

2. Supply and Demand for Workers in the Valentine Area by Occupation

The most basic measure of the balance between supply and demand in an occupation is whether there is a gap of between the number of workers being prepared for the occupation each year and the annual need for new workers to enter the occupation. Over time, the annual flow into and out of the occupation will influence how scarce, and difficult to find, workers become. This chapter compares the number of individuals joining each occupation group each year, after leaving school (either as a graduate or a non-graduate) or through net in-migration, with the number of openings in an occupation each year due to job growth or the replacement of workers. This chapter further examines the potential for individuals who are not working to reenter the labor force. This provides an additional source of potential new workers for Valentine area employers.

Lastly, the level of "churn" among the existing workers is examined within each occupation. Churn is the rate at which workers in an occupation move between jobs. It is critical since jobs within a single occupation can differ in terms of requirements for skill and experience. An abundance of new graduates can help fill entry level positions but existing, more experienced workers (i.e. former entry level workers) are needed to fill some openings. Churn is a process which improves the skill match for workers and employers in an occupation. As a measure of potential churn, this chapter estimates the percent and number of experienced workers within each occupation who are searching for new work.

A. Supply versus Demand for Workers by Occupation

The first step is to compare the annual openings and new entrants to each major occupation group within the Valentine area. Openings in an occupation is a function of net job growth and the replacement of workers.

New entrants to an occupation include local individuals who leave school and net migrants to the Valentine area. Individuals who leave school include both graduates and non-graduates. Graduates are high school graduates (and GED completers), community college graduates or college graduates each year. Non-graduates include individuals who drop out of high school, community college, or college. College and community college graduates are assigned to occupations based on their major field of study. High school graduates and non-graduates are assigned to occupations which do not require a college degree based on the number of annual openings. Analysis also adjusts for the share of graduates and non-graduates who are likely to be active participants in the labor force in any given year. This provides the best estimate of how many "workers" are being added in the area economy each year.

Net openings in the Valentine area labor market are based on projections developed by the Office of Labor Market Information (LMI) of the Nebraska Department of Labor. Specifically, the Nebraska LMI generates projections of the demand for additional workers in an occupation based on net job growth and worker replacement, as part of its *Nebraska 2016-2026 Long-Term Occupational Projections*. Projections are made for the State of Nebraska, metropolitan areas and economic development districts. The Valentine area includes the counties which account for approximately 37 percent of the employment in the Sandhills Economic Development District, as well as adjacent counties (at the edge of neighboring districts) which have common with occupations trends with the Sandhills district. A similar argument can be made about adjacent Todd and Tripp counties in South Dakota.[1] Annual

[1] Non-metropolitan occupation projections in South Dakota are made for three large regions which run from the southern to the northern border of the state.

openings occur due to net job growth and worker replacement. Projections of net job growth by occupations are developed by the Nebraska Department of Labor. Projections of annual openings due to worker replacement are based on the assumption that 2 percent of workers retire each year. In other words, the average number of workers in each occupation during the 2016 to 2026 period is multiplied by 2 percent to estimate the number of workers that must be replaced due to retirements. Job openings created due to workers switching jobs are not included since it does not represent a need for additional workers.

Table 2.1 also contains estimates of the number of local individuals finishing college or community college in a given year with a potential to enter each occupation in the Valentine region. As the Valentine region is not home to a college, the degrees of college graduates are estimated based on fields of study at a set of Nebraska Universities which students from the Valentine region would be most likely to attend, in particular the University of Nebraska – Kearney and the University of Nebraska - Lincoln. Data on degrees was obtained from the IPEDS data base (the *College Navigator* web portal) maintained by the U.S. Department of Education. Degree choice patterns were applied to the estimated number of Valentine region residents expected to complete college each year.

The number of high school graduates in the Nebraska portion of the Valentine area is estimated based on the number of 2017-2018 high school graduates in Nebraska (24,341), and the ratio of Valentine area 15- to 17-year olds to Nebraska 15- to 17-year olds (0.6%). Data on the share of 15- to 17- year olds comes from the U.S. Bureau of Census. The 15- to 17- age range is used since such estimates are regularly generated by the U.S. Bureau of Census for counties and since some 18 year-olds are already attending college. The annual number of high school graduates in Nebraska is based on 23,747 graduates reported in the *2019 Nebraska Higher Education Progress Report* from the Nebraska's Coordinating Commission on Postsecondary Education and national data form the U.S. Department of Education's *Digest of Education Statistics* indicating that 2.5% of high school-age students attend home school.[2] Multiplying the annual number of Nebraska high school graduates by the share of Nebraska 15- to 17-year olds in the Valentine area yields an estimated of 141 annual high school graduates (including a GED for home school students). There also would be graduates from the Todd and Tripp County in South Dakota. The annual number of graduates in the two counties was estimated based on one third of the individuals in the 15- to 17-age range multiplied by the graduation rates for Todd County School District and the Winner School District (Tripp County)[3], to estimate 135 graduates from the South Dakota counties. The total estimated annual high school graduates for the Valentine area was 276.

How many of those 276 high school graduates decide to attend college or community college? According to the *2019 Nebraska Higher Education Progress Report* 64.8% of the students attend a degree-granting institution (either in-state or out-of-state) within one-year of completing high school.[4] That percentage includes individuals who attend a college or a community college. The rate is estimated to be 49.4% for the South Dakota counties, which have a large share of Native American students, based on the college attendance for Native American students in Nebraska.[5] Therefore, the annual flow of

[2] National Center for Education Statistics (not dated). *Digest of Education Statistics*, Table 206.10: Number and percentage of homeschooled students ages 5 through 17 with a grade equivalent of kindergarten through 12th grade, by selected child, parent, and household characteristics: 2003, 2007, and 2012. Available at: https://nces.ed.gov/fastfacts/display.asp?id=91. Accessed January 21, 2017.

[3] The Rosebud Education State of the Reservation Report 2014.

[4] Figure 1.1.c.2

[5] *2019 Nebraska Higher Education Progress Report, Table A.5.5.*

individuals who attend a post-secondary institution is approximately 57.3 percent of 276, or 158. Data provided in the *2019 Nebraska Higher Education Progress Report* suggests that 28.6% of high school graduates attend 2-year public colleges (community colleges) with the remaining 71.4% attend public 4-year colleges or private colleges.[6] Applying this 71.4% rate to the 158 graduates attending college yields an estimate that 113 Valentine area high school graduates attend college. The *2019 Nebraska Higher Education Progress Report* indicates that overall graduation rate for individuals who begin at a post-secondary institution in Nebraska is 51.3 percent. This implies 58 potential 4-year college graduates each year who attended high school in the Valentine area, and 66 with 8 Valentine area community college graduates expected to go on to college (see next paragraph). An estimated 32 of these would return to the Valentine area to work after graduation. This estimate is based on research by the Pew Research Center (2008)[7], which indicates that 48 percent of rural adults, including those who attended college or served in the military, choose to live in their hometown as adults. Most of those 32 individuals will be active in the Valentine area labor market in any given year. Data from the National Center for Education Statistics found that in 2014 87.0 percent of 25 to 64 year olds who complete a Bachelor's Degree were in the formal labor market. [8] This participation rate for college graduates was combined with the 32 graduates to estimate that 28 college graduates would be available to join the labor force in the Valentine area during a given year. These graduates are reflected in Table 2.1.

Of the 158 Valentine area graduates preparing to attend college, 28.6% are expected to attend community college. This implies 45 students attending community college each year. The *2019 Nebraska Higher Education Progress Report* indicates that overall graduation rate for individuals who begin at a community college in Nebraska is 33.7 percent.[9] This implies 15 potential community college graduates each year who attended high school in the Valentine area. These graduates are assigned to degree programs based on averages for Mid-Plains Community College, which are available from the *College Navigator* web portal maintained by the U.S. Department of Education. The Valentine area is served by multiple Nebraska Community Colleges in both Nebraska and South Dakota and Mid-Plains Community College, which serves Cherry County, is chosen as the template. The 8 graduates in the general fields of study of life, physical and social sciences are assumed to ultimately continue onto college, and were accounted for in the discussion of college graduates above. The remaining fields of study contributed 7 associate's degree graduates. Most of these community college graduates are expected to participate in the labor force in any given year while they are in the prime working age of 25 to 64. In particular, data from the National Center for Education Statistics found that in 2014 77.6 percent of 25 to 64 year olds who completed an Associate's Degree were in the formal labor market. This compares to 87.0 percent of 25 to 64 year olds who completed a Bachelor's degree. This participation rate for community college graduates was combined with the 7 graduates to estimate that 5 community college graduates would be available to join the labor force in the Valentine area during a given year. These graduates also are reflected in Table 2.1.

[6] Table A.5.3

[7] Taylor, Paul, Rich Morin, D'Vera Cohn, and Wendy Wang, 2008. *American Mobility: Who Moves? Who Stays Put? Where's Home?*, A Social & Demographic Trends Report, Pew Research Center, http://pewreserach.org.

[8] Institute for Education Sciences, 2015. "Employment Rates and Unemployment Rates by Educational Attainment," National Center for Education Statistics, U.S. Department of Education (May). Accessed at nces.ed.gov/programs/coe/indicator_cbc.asp

[9] Figure 2.2.1

Table 2.1: Annual Openings and School Leavers by Occupation Group

		Annual School Leavers		
Occupation	Annual Net Openings NDOL	College and Community College Graduates	Others	Total
Management	32	1	0	1
Business and Financial Operations	7	6	0	6
Computer and Mathematical	0	1	0	1
Architecture and Engineering	1	3	0	3
Life, Physical and Social Sciences	3	8	0	8
Community and Social Service	2	1	0	1
Legal	0	1	0	1
Education, Training and Library	18	2	0	2
Arts, Design, Entertainment, Sports, and Media	5	3	0	3
Healthcare Practitioners and Technical Workers	16	4	0	4
Healthcare Support	9	0	8	8
Protective Services	2	0	2	2
Food Preparation and Serving Related	22	0	22	22
Building and Grounds Cleaning and Maintenance	12	0	11	11
Personal Care and Services	6	0	6	6
Sales and Related	25	0	24	24
Office and Administrative Support	29	1	28	29
Farming, Fishing, and Forestry	51	0	50	50
Construction and Extraction	15	0	14	15
Installation, Maintenance and Repair	15	1	15	16
Production	9	0	9	9
Transportation and Material Movers	25	0	25	25

Sources: Nebraska Depart of Labor for job openings, IPEDS, U.S. Department of Education for graduates, and BBR calculations

Notes: 1) Others includes high school dropouts, high school graduates (GED completers) or college or community college non-completers. 2) college or community college graduates and others may not sum to total leavers due to rounding

The next task is to estimate the annual number of school leavers in three categories: individuals leaving college before graduating, those finishing high school but not pursing a two- or four-year college degree and those who drop out of high school. Methods for making each estimate are described below.

High School Graduates Not Continuing to College or Community College. Calculations above estimated that there are 276 annual high school graduates (including a GED for home school students) in the Valentine area. How many of those individuals decided not to attend college or community college? Calculations presented earlier were that 57.3 percent of those students attend a degree-granting college

or community college (either in-state or out-of-state) within one-year of completing high school. Therefore, the annual flow of individuals who potentially enter the job market as high school graduates is approximately 42.7 percent of 276, or 118. A portion of these individuals will participate in the labor force in a given year. The National Center for Education Statistics found that 72.0% of 25 to 64 year olds those who completed high school but did not participate in post-secondary education were in the labor market in 2014. This percentage is applied to 118 to yield 85 additional labor force participants in the Valentine area with a high school degree only.

High School Dropouts. The *2019 Nebraska Higher Education Progress Report* indicates that Nebraska has a six-year high school graduation rate of 92 percent. This graduation rate implies that there is one non-completer for each 11.5 high school graduates. However, the graduation rate is significantly lower in Todd and Tripp counties in South Dakota. Taking this into account there are an estimated 115 high school dropouts in the area in any particular year (although some of these individuals will ultimately obtain a GED). The National Center for Education Statistics report found that 59.9 percent of those who did not complete high school were participating in the labor market in 2014. Applying this rate to the population of 115 implies that high school non-completers contribute 69 additional labor force participants each year.

College and Community College Non-Completers. As noted earlier, the 2019 *Nebraska Higher Education Progress Report* indicates that overall graduation rate for individuals who begin at a post-secondary institution in Nebraska is 51.3 percent implying that 48.7 percent are non-completers. Applying this non-completion rate to the 57.3 percent of 276 high school graduates who attend college yields an estimate that 77 individuals will potentially enter the local labor market each year without a completing a post-secondary degree. The National Center for Education Statistics report indicates that 77.6 percent of these will enter the labor force, implying 60 additional labor force participants each year.[10]

Altogether, approximately 213 high school only completers, high school non-completers, and college non-completers enter the Valentine area labor market each year. These individuals are distributed among the occupations which do not *require* a college or community college degree (although workers may have a degree) including: healthcare support; protective services; food preparation and serving-related; building and grounds; personal care and services; sales, office and administrative support; farming, fishing and forestry; construction and extraction; installation, maintenance and repair; production; and transportation and material moving occupations. The 213 individuals are allocated to these occupations based on the share of annual openings.

Results in Table 2.1 show that there is a large deficit of school leavers in the Valentine area relative to annual openings for teachers and for health care practitioners. There is no deficit in most blue collar and service occupation groups. Across all occupations there are an estimated 57 more school leavers than projected openings in the Valentine area each year.

[10] This estimate assumes that individuals who fail to complete a college or community college degree at Valentine area post-secondary institution will return to the community where they completed high school. Similarly, Valentine area high school graduates who attended but did not complete post-secondary education in another city would return to the area.

Table 2.1, however, does not reflect the flow of workers into and out of the Valentine area each year. In particular, the Valentine area loses an estimated 63 *workers* each year due to net immigration to other regions. Estimates of entrants and openings after net migration are provided in Table 2.2. Estimates for migration are based on U.S. Bureau of Census data for total population. Estimates of total population are converted to estimates of migration by workers utilizing employment to population ratios. After factoring in net migration, across all occupations there are an estimated 121 more projected job openings in the Valentine area labor market each year than projected market entrants.

Table 2.2: Annual Openings and Entrants by Occupation Group, Including Migrants

		Annual Entrants		
Occupation	Annual Net Openings NDOL	Total Finishers	Net Migration	Total
Management	32	1	-9	-9
Business and Financial Operations	7	6	-2	4
Computer and Mathematical	0	1	0	1
Architecture and Engineering	1	3	0	2
Life, Physical and Social Sciences	3	8	-1	7
Community and Social Service	2	1	-1	1
Legal	0	1	0	1
Education, Training and Library	18	2	-5	-3
Arts, Design, Entertainment, Sports, and Media	5	3	-1	2
Healthcare Practitioners and Technical Workers	16	4	-3	1
Healthcare Support	9	8	-2	7
Protective Services	2	2	0	1
Food Preparation and Serving Related	22	22	-4	18
Building and Grounds Cleaning and Maintenance	12	11	-2	9
Personal Care and Services	6	6	-1	5
Sales and Related	25	24	-8	16
Office and Administrative Support	29	29	-9	20
Farming, Fishing, and Forestry	51	50	-7	43
Construction and Extraction	15	15	-2	13
Installation, Maintenance and Repair	15	16	-2	14
Production	9	9	-1	8
Transportation and Material Movers	25	25	-2	23

Sources: Nebraska Depart of Labor for job openings, IPEDS, U.S. Department of Education for graduates, and BBR calculations

Notes: 1) Others includes high school dropouts, high school graduates (GED completers) or college or community college non-completers. 2) college or community college graduates and others may not sum to total leavers due to rounding

Net outmigration also influences the balance between openings and labor market entrants in specific occupation groups. In Table 2.2, estimates of net out-migration by workers are allocated to 5 civilian major occupation categories and for military personnel: 1) management, business, science, arts, 2) service occupations, 3) sales and office occupations, 4) natural resources, construction, and maintenance, 5) production, transportation and material moving and 6) military specific occupations. The Bureau of Census also has data on the frequency of migration within these occupation categories. After making this adjustment, the annual deficit of entrants into the teaching and health care practitioner occupations grows larger and a deficit develops for services and sales occupations.

Further, there is an additional reason to be concerned about the available supply of new workers. In particular, an assumption throughout the analysis has been that workers entering the labor market would remain viable to work over their lifetime. Yet, in some cases, workers with appropriate training will diminish their ability to utilize those skills by developing a poor work history or personal issues which discourage employers from hiring them for those jobs. Table 2.3 show the potential size of this problem. The table lists the percentage of respondents to the *Valentine Area Survey of Hiring and Training Needs* who indicated it was difficult to hire workers in part due to: 1) poor work history and 2) failure to pass a background check. These percentages are significant, especially given the existing gap between openings and annual entrants among teachers, health care practitioners and sales and service occupations.

Table 2.3: Total Annual Openings and Entrants and Problems with Work History

	Balance And Problems
Annual Net Openings	304
Annual Entrants	183
Share of Applicants with	
Poor Work History	56.4%
Failed Background Check	22.9%

Sources: IPEDS, U.S. Department of Education for graduates and *Valentine Area Survey of Hiring and Training Needs* and BBR calculations

Potential Supply from Area Residents Who Are Not Currently Employed

While Tables 2.1 through 2.3 address the long-term balance between annual openings and entrants in each occupation, there is another potential source to bring new workers into the Valentine area labor market over the next few years. That sources is area residents who are not currently employed. These individuals can be drawn back into the work force both by providing job opportunities to unemployed workers and drawing back individuals who are currently out of the labor force, such as retirees or homemakers.

Table 2.4 provides information on the Valentine area population who are not currently employed but are actively seeking work. Data in the table are assembled using responses of individuals to the *Valentine Area Labor Availability Survey*. That survey included a significant number of responses from individuals who indicated that they were unemployed, retired, or were currently homemakers. Respondents provided information both about their previous occupation when they worked in the past and whether they are actively seeking a job at the moment. Survey results indicate that 7.4 percent would “re-enter the workforce next year if a suitable job is available.” This percentage is much higher than might be expected given the 2% to 3% unemployment rate that prevails in the Valentine area.

However, the difference makes sense given that the criteria for being classified as unemployed is not as strict in the *Valentine Area Labor Availability Survey*. In particular, persons do not need to demonstrate that they have been actively searching beyond a minimum level in recent weeks.

This broader 7.4 percent of individuals who are open to rejoining the workforce implies a chance to add a significant number of new workers to the labor force. In particular, there are approximately 8,050 adults age 16 and above in the Valentine area classified as out of the labor force or unemployed. The 7.4 percent figure indicates that there are potentially up to 592 additional workers for the Valentine area economy. Table 2.4 shows the occupations for which these potential workers might be available, based on the previous occupation. Table 2.4 also shows that, among those surveyed individuals who do not have previous work experience, none are actively search for a new job.

Table 2.4: Number of Jobless Individuals Actively Searching for a Job by Previous Occupation

Occupation	Valentine Area
Management	74
Business and Financial Operations	0
Computer and Mathematical	0
Architecture and Engineering	0
Life, Physical and Social Sciences	0
Community and Social Service	45
Legal	0
Education, Training and Library	31
Arts, Design, Entertainment, Sports, and Media	0
Healthcare Practitioners and Technical Workers	0
Healthcare Support	0
Protective Services	0
Food Preparation and Serving Related	44
Building and Grounds Cleaning and Maintenance	78
Personal Care and Services	10
Sales and Related	163
Office and Administrative Support	88
Farming, Fishing, and Forestry	0
Construction and Extraction	0
Installation, Maintenance and Repair	8
Production	42
Transportation and Material Movers	8
Never Worked	0

Source: Valentine Are*a Labor Availability Survey*

As seen in Table 2.4, among white collar occupations, there are 74 individuals with management experience who have an interest in reentering the workforce as well as 45 community and social service workers and 31 teachers. Among service occupations, the largest number of potential reentrants are former sales and related workers, office and administrative workers, building and grounds cleaning and maintenance workers and food preparation and serving related workers. Results therefore show the potential over the next few years to plug some of the annual gap between openings and entrants among teachers and workers in service occupations through drawing the unemployed, retired workers and homemakers back into the workforce.

B. Job Search among the Currently Employed

Beyond the overall balance of openings and entrants in an occupation, employers have a need for hiring experienced workers. Such positions are often filled by workers who are currently employed. While this can be frustrating for employers who lose workers, this "churn" of workers can be beneficial. In particular, job search by the employed helps experienced workers find the best match between their job and their skills and experience. Finally, workers who are hired away, in turn, leave open positions which create an opportunity, and potentially a better job match, for another worker.

The *Valentine Area Labor Availability Survey* asked employed workers whether they were actively searching for work, along with questions about their experience and occupation. Survey results indicate that 7.5 percent of currently employed workers are actively searching for a job. This implies that 859 employed workers are actively searching at any moment in time. Survey results also can be used to generate statistics about the share and number of employed workers in each occupation who are actively searching for a job. These shares and numbers are presented in Table 2.5.

Results in Table 2.5 show great variation in the share of employed workers who are actively seeking a new job. In most occupations, between 2% and 24% of workers are actively seeking new work. The highest shares are for food preparation and serving related workers (31.0%) and healthcare support workers (29.1%)**.** Among blue collar occupations, 24.3 percent of construction and extraction workers are looking for new employment. Among white collar workers, the share searching for work is highest for community and social services workers (21.4%) and arts, design, entertainment, sports and media workers (17.5%). For service occupations, 12.4 percent of office and administrative support workers are actively seeking new employment.

There are 188 office and administrative support workers searching for new employment along with 154 construction workers, 88 farm workers and 82 community and social service workers.

Table 2.5: Percent and Number of Employed Individuals Who Report Actively Searching for a Job by Occupation

Occupation	Percent Actively Seeking a Job	Number Actively Seeking a Job Valentine Area
Management	1.0%	24
Business and Financial Operations	2.3%	9
Computer and Mathematical	0.0%	0
Architecture and Engineering	0.0%	0
Life, Physical and Social Sciences	0.0%	0
Community and Social Service	21.4%	82
Legal	14.0%	9
Education, Training and Library	5.3%	57
Arts, Design, Entertainment, Sports, and Media	17.5%	19
Healthcare Practitioners and Technical Workers	4.7%	40
Healthcare Support	29.1%	49
Protective Services	0.0%	0
Food Preparation and Serving Related	31.0%	68
Building and Grounds Cleaning and Maintenance	5.5%	16
Personal Care and Services	6.7%	19
Sales and Related	4.8%	36
Office and Administrative Support	12.6%	188
Farming, Fishing, and Forestry	8.4%	88
Construction and Extraction	24.3%	154
Installation, Maintenance and Repair	0.0%	0
Production	0.0%	0
Transportation and Material Movers	0.0%	0

Source: *Valentine Area Labor Availability Survey*

As is evident from Table 2.5, there is a significant number of employed workers actively seeking new employment at any moment in time. In fact, the number of employed workers actively searching for a work typically dwarfs the number of annual entrants to each occupation. Table 2.6 compares the estimated number of employed workers actively searching for a work at a given moment (Table 2.5) with the estimated number of annual of entrants, by occupation (Table 2.2) for the Valentine area. With the exception of a few white collar occupations and three blue collar occupations, there are more experienced workers actively searching for work than new entrants. This highlights the critical role that job search by experienced workers plays in operation of the labor market.

Table 2.6: Relative Abundance of Currently Employed Job-Seekers by Occupation

Occupation	School Finishers and Net Migrants Valentine Area	Employed But Actively Seeking Work Valentine Area
Management	-9	24
Business and Financial Operations	4	9
Computer and Mathematical	1	0
Architecture and Engineering	2	0
Life, Physical and Social Sciences	7	0
Community and Social Service	1	82
Legal	1	9
Education, Training and Library	-3	57
Arts, Design, Entertainment, Sports, and Media	2	19
Healthcare Practitioners and Technical Workers	1	40
Healthcare Support	7	49
Protective Services	1	0
Food Preparation and Serving Related	18	68
Building and Grounds Cleaning and Maintenance	9	16
Personal Care and Services	5	19
Sales and Related	16	36
Office and Administrative Support	20	188
Farming, Fishing, and Forestry	43	88
Construction and Extraction	13	154
Installation, Maintenance and Repair	14	0
Production	8	0
Transportation and Material Movers	23	0

Sources: IPEDS, U.S. Department of Education for graduates, *Valentine Area Labor Availability Survey* and BBR calculations

3. Barriers to Employment and the Local Labor Market

The preceding chapter found that there are a significant group of currently employed workers who are actively looking for a new job. In many occupations, there are also individuals who are not currently working who would be likely to enter the workforce if a suitable job is available. These workers represent an important skill resource for Valentine area employers. Two questions come to mind about these potential workers. First, what challenges or barriers do they foresee in seeking new employment? Second, do these challenges appear to represent a skills gap? These two questions are discussed below.

Survey results reported in the *Valentine Area Labor Availability Survey* show the types of barriers perceived by employed workers who would consider changing jobs. The various criteria fall into categories including working conditions, suitability for employment, work schedule and compensation. Analysis focuses on the currently employed. Workers who are unemployed, retired or otherwise out of the labor force generally did not respond to the question.

Three-quarters of employed job seekers (73.4%) cite a lack of job opportunities in the area as a barrier to changing jobs. Further, one in seven potential job seekers (14.2%) report facing a barrier to finding new employment because they are "overqualified." Other common obstacles perceived by potential job seekers relate to compensation and work hours available from local employers. Nearly three-quarters (71.1%) cite "inadequate pay offered by local employers" as an obstacle. Inadequate benefits are cited by 94.4 percent of employed job seekers. Inadequate hours are cited by 47.6 percent.

Potential seekers also perceive that their own background may limit their potential to find new employment. Thirty-one percent (30.7%) cite a lack of training while 27.7 percent cite a lack of education. Besides skill, workers also are concerned about elements of their work history or personal history which create a perceived barrier. Poor credit history is noted by 9.1 percent of employed potential job seekers. Credit history is sometimes used as a screen by potential employers. Work history is cited by 2.8 percent, while a criminal record is cited as a barrier by 2.4 percent of job seekers.

Results also show that family considerations create a barrier for some workers. In particular, a lack of childcare is noted by 13.2 percent of employed potential job seekers and family commitments are noted by 27.8 percent. Currently employed workers may have found a position which can accommodate their family commitments, a feature which binds them to that position.

Do these obstacles suggest the presence of a skills gap in the Valentine area? Potentially so, if potential job seekers perceive they have inadequate education or training, or have a life history such as a criminal record which will dissuade employers from utilizing their skills, or if employers offer inadequate wages to attract potential job seekers into the new jobs where their skills are needed. Below we examine this evidence of a skills gap in more detail, by comparing worker assessments with those of employers, and comparing wage expectations with market wages in the Valentine area.

Table 3.1 compares employer perceptions of worker skill with the perceptions of potential job seekers in the Valentine area. Employer perceptions come from the *Valentine Area Survey of Hiring and Training Needs*. In particular, employers were asked whether a series of factors, including occupation skills, make it difficult to hire workers in particular occupations. In Valentine, employer perceptions of a lack of occupation-specific skills from whatever source (a lack of education, lack of training) exceed the perceptions of potential job seekers.

Table 3.1: Employer and Employed Potential Job Seekers Perceptions of Skill and Training

Issue	Employed Potential Job Seekers	Employers Hiring for Specific Occupations
Percent Indicating a Lack of Training is an Obstacle to Changing Jobs	30.7%	
Percent Indicating a Lack of Education is an Obstacle to Changing Jobs	27.7%	
Percent Indicating that Lack of Occupation Specific Skills Makes It Difficult to Hire		55.6%
Percent Indicating that Lack of Required Licenses/Certificates Makes It Difficult to Hire		18.7%

Sources: *Valentine Area Survey of Hiring and Training Needs* and *Valentine Area Labor Availability Survey*

Table 3.2 looks at other workforce issues which influence employability; in particular, facts or tendencies in the background of workers which may reduce or prohibit employability even if workers have the necessary skills for an occupation. For the Valentine area, the table shows that 22.9 percent of employers indicate that failed background checks make it difficult to hire. A background check can include a variety of factors including a criminal record, substance abuse, or evidence of credit problems. Results from the *Valentine Area Labor Availability Survey* indicate that some potential job seekers also recognize that difficulties with their background could be a barrier to employment.

Table 3.2: Employer and Employed Potential Job Seekers Perceptions of Worker Background and History

Issue	Employed Potential Job Seekers	Employers Hiring for Specific Occupations
Percent Indicating Criminal Record is an Obstacle to Employment	2.4%	
Percent Indicating Employment History is an Obstacle to Employment	2.8%	
Percent Indicating Poor Credit History is an Obstacle to Employment	9.1%	
Percent Indicating Failed Background Check Makes It Difficult to Hire		22.9%
Percent Indicating that Poor Work History Makes It Difficult to Hire		56.4%

Sources: *Valentine Area Survey of Hiring and Training Needs* and *Valentine Area Labor Availability Survey*

Table 3.2 also shows that 56.4 percent of employers indicate that a poor work history makes it difficult to hire, as reported by respondents to the *Valentine Area Survey of Hiring and Training Needs*. Follow-up discussions with employers suggest that poor work history refers to evidence of frequent "job-hopping," or other indicators that workers do not fit in well at their workplace. Note that there is a large difference of opinion between employers and workers with regards to work history. More than one half of employers indicate that applicants with a poor work history make it difficult to hire but only 2.8 percent of employed job seekers feel that employment history is an obstacle to finding a new job. Such problems can certainly discourage hiring, even when workers have required skills. This is the largest difference of opinion between employers and job seekers among any of the issues presented in Tables 3.1 and 3.2.

The final issue pertains to the wages of potential jobs. This is another area where workers and employers have very different perceptions. As was noted above, nearly three-quarters (71.1%) of potential job seekers see the wages available from local employers as an obstacle to finding a new job. At the same time, just 35 percent of Valentine area employers see wage demands from workers which are "too high" as a cause of difficulty in hiring, according to the results in the report *Valentine Area Survey of Hiring and Training Needs.*

This issue is worthy of further study. Fortunately, a wealth of information is available about local wages, including detailed information about the wage desires of workers from the *Valentine Area Labor Availability Survey* and information about the average wages by occupation in the region from the U.S. Department of Labor. The information can be used to assess whether job seekers have realistic expectations regarding wages in potential new jobs; in particular, whether job seekers expect large wage increases or wages which are well above the occupation average in the regional economy. While some increase in wages would be expected in order to draw workers to a new job, unrealistic expectations could be a source of a skills gap.

Results in Table 3.3 show current wages and desired wages for employed potential job seekers by education attainment category. This is a comparison between the current wage reported by respondents to the *Valentine Area Labor Availability Survey* and the minimum wage which would be required for respondents to improve their job situation (i.e., the desired wage), assuming a new position met their other most important job condition requirements. Results are presented for potential job seekers who report hourly wages.

Table 3.3: Current and Desired Wages of Employed Job Seekers by Educational Attainment

Highest Education Level	Weighted N	Average Current	Averaged Desired	Average Wage	Percent Change
Less than High School	6	$13.89	$16.38	$2.49	17.9%
High School Graduate or GED	173	$15.95	$17.77	$1.82	11.4%
Some College	5	$16.74	$18.84	$2.10	12.5%
Vocation or Technical Degree	43	$17.41	$19.62	$2.21	12.7%
Associate's Degree	74	$19.12	$21.06	$1.93	10.1%
Bachelor's Degree	56	$26.54	$23.24	-$3.30	-12.4%
Master's Degree or Higher	9	$37.58	$51.21	$13.63	36.3%

Source: *Valentine Area Labor Availability Survey*

Results show that potential job seekers with less than a Bachelor's degree hope for a position which pays $1.82 to $2.21 per hour more than their current position. The desired wage increase in percentage terms ranges between 10.1 and 12.7 percent. These percentage differences are significant but perhaps manageable, that is, in-line with the opening ask of a worker who is being recruited to change positions. Potential job seekers with a Bachelor's degree would not require an increase in wages on average. The number of observations for job seekers with less than a high school degree or with a master's degree or higher is small.

Additional insights can be generated by comparing the current and desired wage of potential job seekers by occupation group. This is done in Table 3.4. Results in Table 3.4 show wide variety in desired wage increases, with most of the large desired increases found in select blue collar occupations. Among blue collar workers, farm workers (SOC 45) desire the largest wage increase, at $4.81 per hour (30.6%).

Transportation and material moving workers (SOC 53) desire a $3.36 (23.7%) increase while construction and extraction workers (SOC 47) desire a $2.74 (15.1%) increase. Production workers (SOC 51) desire a smaller increase of $1.88 per hour. Among service occupations, the desired wages increase is $1.96 (15.8%) for sales and related workers (SOC 41), and $1.55 per hour (13.7%) for food preparation and serving related workers (SOC 35). Among white collar workers, the gap is $14.23 per hour (54.6%) for managers (SOC 11), $1.58 (9.9%) for teachers, and $1.39 (8.6%) for community and social service workers.

The larger desired wage increased observed in some occupation groups suggest that wage expectations could be a source of mismatch in the labor market. Before reaching this interpretation, however, it is worthwhile to examine how desired wages compare with the actual wages found in various occupation groups within the Valentine area labor market area. The difference between the desired wages in each occupation group and the average hourly wage in that occupation can be observed in Table 3.5. Current average hourly wage data are based on U.S. Bureau of Labor Statistics occupation wage data for the Northwest Nebraska Area.

For occupations which typically require a college degree (SOC 11-29), desired wages are usually well below the average hourly wage in the Valentine area. While this may occur because potential job seekers are on average younger, and therefore, have not yet gained sufficient experience to command the average wage, the results suggest that the desired wage increases of college educated job seekers are modest and manageable, with the possible exception of management occupations. In other words, the desired wage increases are line with what workers would hope for when changing jobs.

In most cases, the same can be said of occupations which do not typically require a college degree (SOC 31-53). Desired wages are often below or just slightly above regional averages. Among blue collar occupation groups, desired wages are well above average regional wages for farm workers (SOC 45). However, desired wages are only slightly above average for construction and extraction (SOC 47), installation, maintenance and repair (SOC 49) and production workers (SOC 51). Among service occupations, desired wages are well above average only for health care support workers (SOC 31).

Table 3.4: Current and Desired Wages of All Potential Job Seekers by Occupation Group

Occupation Group	Weighted N	Average Current	Averaged Desired	Average Wage	Percent Change
Management	15	$26.06	$40.29	$14.23	54.6%
Business and Financial Operations	4	$20.59	$20.60	$0.02	0.1%
Computer and Mathematical	4	$80.26	$31.59	-$48.67	-60.6%
Architecture and Engineering	3	$14.75	$14.00	-$0.75	-5.1%
Life, Physical and Social Science	0	$0.00	$0.00	$0.00	0.0%
Community and Social Service	11	$16.24	$17.63	$1.39	8.6%
Legal	1	$160.00	$160.00	$0.00	0.0%
Education, Training, and Library	14	$15.92	$17.50	$1.58	9.9%
Arts, Design, Entertainment, Sports, and Media	4	$13.38	$16.75	$3.38	25.2%
Health Care Practitioners and Technical	46	$25.12	$25.93	$0.82	3.2%
Health Care Support	11	$16.17	$17.31	$1.14	7.1%
Protective Service	10	$19.40	$19.20	-$0.20	-1.0%
Food Preparation and Serving Related	19	$11.34	$12.89	$1.55	13.7%
Building and Grounds Cleaning and Maintenance	25	$13.04	$14.07	$1.03	7.9%
Personal Care and Service	4	$12.63	$15.19	$2.56	20.3%
Sales and Related	15	$12.40	$14.36	$1.96	15.8%
Office and Administrative Support	76	$17.45	$18.21	$0.76	4.4%
Farming, Fishing and Forestry	20	$15.73	$20.54	$4.81	30.6%
Construction and Extraction	39	$18.12	$20.86	$2.74	15.1%
Installation, Maintenance and Repair	15	$23.54	$22.30	-$1.24	-5.3%
Production	15	$16.24	$18.12	$1.88	11.6%
Transportation and Material Moving	11	$14.20	$17.56	$3.36	23.7%

Source: *Valentine Area Labor Availability Survey*

Table 3.5: Average Desired and Actual Wages of All Potential Job Seekers by Occupation Group

Occupation Group	Weighted N	Average Current	Averaged Desired	Average Wage	Valentine Area Average Wage (May 2018)
Management	15	$26.06	$40.29	$14.23	$35.89
Business and Financial Operations	4	$20.59	$20.60	$0.02	$28.15
Computer and Mathematical	4	$80.26	$31.59	-$48.67	N/A
Architecture and Engineering	3	$14.75	$14.00	-$0.75	$31.48
Life, Physical and Social Science	0	$0.00	$0.00	$0.00	$25.92
Community and Social Service	11	$16.24	$17.63	$1.39	$19.84
Legal	1	$160.00	$160.00	$0.00	$29.92
Education, Training, and Library	14	$15.92	$17.50	$1.58	$22.66
Arts, Design, Entertainment, Sports, and Media	4	$13.38	$16.75	$3.38	$18.84
Health Care Practitioners and Technical	46	$25.12	$25.93	$0.82	$33.89
Health Care Support	11	$16.17	$17.31	$1.14	$14.01
Protective Service	10	$19.40	$19.20	-$0.20	$19.46
Food Preparation and Serving Related	19	$11.34	$12.89	$1.55	$11.54
Building and Grounds Cleaning and Maintenance	25	$13.04	$14.07	$1.03	$13.03
Personal Care and Service	4	$12.63	$15.19	$2.56	$15.13
Sales and Related	15	$12.40	$14.36	$1.96	$16.37
Office and Administrative Support	76	$17.45	$18.21	$0.76	$16.07
Farming, Fishing and Forestry	20	$15.73	$20.54	$4.81	$16.59
Construction and Extraction	39	$18.12	$20.86	$2.74	$19.46
Installation, Maintenance and Repair	15	$23.54	$22.30	-$1.24	$21.26
Production	15	$16.24	$18.12	$1.88	$17.65
Transportation and Material Moving	11	$14.20	$17.56	$3.36	$17.91

Source: *Valentine Area Labor Availability Survey* and U.S. Bureau of Labor Statistics

The gap between desired and actual wages for managers, farm workers and health care support workers may make it especially difficult for employers to find needed workers. But, are employers having difficulty? In other words, are these the occupations where employers note that it is most difficult to find workers? This question is addressed in Table 3.6. For each of the 3 occupation groups, results are presented regarding the percentage of employers who report that it is difficult to hire workers and the percentage of employers who feel that wage demands are “too high.” For all 3 occupation groups, employers report that it is more difficult than average (83.4%) to find workers. However, for farm workers (SOC 45), a below-average share (25.9%) of employers indicate that it is difficult to hire workers due to wage demands which are “too high.” Only the management (SOC 11) and health care support occupation groups (SOC 31) are above average in terms of the difficulty of hiring and the share of employers reporting wage demands which are “too high.”

Table 3.6: Share of Business Respondents in the Survey of Valentine Area Businesses about Skill and Training Requirements Reporting It Was Difficult to Find Workers, By Selected Occupation

Occupation Group	Percent of Employers Indicating That Wage Demands for the Occupation Were "Too High" (Average = 35.0%)	Percent of Employers Indicating That It Is "Difficult" To Find Workers in Occupation (Average = 83.4%)
Management	61.1%	100.0%
Health Care Support	43.4%	94.6%
Farming, Fishing and Forestry	25.9%	93.0%

Source: *Valentine Area Survey of Hiring and Training Needs*

In summary, both employers and potential employees perceive some common sources of difficulty in hiring. Both perceive that some potential employees lack occupation-specific skills (lack of education, lack of training) and that a significant share of potential employees have factors in their background (a poor credit history or the inability to pass a background check) which can make hiring difficult, even when workers have appropriate skills for a job. In contrast to potential employees, employers also note that applicants with a "poor work history" make hiring difficult. Some workers may not be aware that "job hopping" or other evidence of an inability to get along at work is harming their employment prospects. Finally, there is only limited evidence that the desire for higher wages is a significant source of the skills gap in the Valentine area. The strongest evidence of such a wage-based skills-gap is found among managers and health care support workers.

Worker retirements are another potential source for a skills gap in the Valentine area. In particular, many firms rely on skilled workers who are reaching retirement age. This issue is especially acute because the large baby-boom generation cohort is reaching retirement age.

The *Valentine Area Survey of Hiring and Training Needs* asked employers whether they were concerned with the potential loss of skill and experience due to retiring workers. Thirty-four percent of employers responded that they are somewhat or very concerned due to retirements in the next year while 55.9 percent are somewhat or very concerned due to retirements over the next 5 years (28.3 percent are very concerned). Among employers, 35.5 percent report that they are taking steps to address potential skills gaps which might arise from employees retiring. Another 9.9 percent indicate they are planning to take steps. Among employers which are already taking steps, 21.4 percent are training current workers in the skills that will be lost through retirement, 22.9 percent are providing on-the-job training to new workers, and 9.3 percent are hiring workers with those skills. Another 13.0 percent are retaining workers on a part-time or consulting basis and 6.1 percent are encouraging workers to delay retirement.

4. Detailed Evaluation of Select Occupations

This section compares information from the employer and household surveys and secondary data from government sources to develop a profile of worker supply and demand in specific skilled occupations. Occupations were selected that have been identified by the Nebraska Department of Labor as a high wage occupation in the region and/or when evidence of a skills gap was identified in Chapters 2 and 3. Analysis should reveal the nature of the skills gap, if any, found in different occupations. A detailed analysis is provided for the following occupations:

Heavy and Tractor-Trailer Truck Drivers (SOC CODE 53-3032)
Licensed Practical and Licensed Vocational Nurses (SOC CODE 29-2061)
Farmworkers, Farm, Ranch and Aquaculture Animals (SOC CODE 45-2093)
Welders, Cutters, Solderers and Brazers (SOC CODES 51-4121)
Agricultural Equipment Operators (SOC CODE 45-2091)

A. Heavy and Tractor-Trailer Truck Drivers (SOC CODE 53-3032)

Heavy and tractor-trailer truck drivers transport goods from one place to another, often through long haul routes. This is considered a H3 occupation by the Nebraska Department of Labor, meaning it offers higher wage earnings opportunities. Heavy and tractor-trailer truck drivers also are a primary occupation within the transportation and material moving occupation group. The mean hourly wage for this occupation in the Valentine area was $19.70 in 2018. Finding workers is challenging in this occupation. As seen in Table 4.1, 100.0 percent of businesses report that it is difficult to hire heavy and tractor-trailer truck drivers. That is a much higher percentage of difficulty than is found for occupations overall (83.4%). Table 4.1 also shows the reasons for difficulty in hiring according to Valentine area employers who hire heavy and tractor-trailer truck drivers**.** The primary challenges are applicants who lack required licenses (71.8%), have a poor work history (71.4%) and who cannot pass a background check (44.3%). The share of employers reporting it is difficult to hire because applicants cannot pass a background check is nearly twice as large for heavy and tractor-trailer truck drivers than for all occupations. A lack of experience is another common concern (65.6%) for employers hiring truck drivers**,** and 82.3 percent of employers require applicants to have driving experience**.**

Data on annual openings for the heavy and tractor-trailer truck driver occupation in the Valentine area indicate that there 11 openings per year due to retirements or net job growth, as seen in Table 4.1. **C**ommunity colleges serving the area do not provide a truck driver certificate program but there may be private truck driving schools available to residents. The *Valentine Area Labor Availability Survey* did not identify any former truck drivers in the Valentine area who report an interest in re-entering the workforce.

Given the significant share of applicants who lack required licenses, there is a need to attract more workers to seek truck driving training and certificates, even at schools located outside of the region. At the same time, workers in this occupation should avoid behaviors which make it difficult to pass a background check.

Table 4.1
Key Findings for the Heavy and Tractor-Trailer Truck Drivers Occupation

Occupation	Heavy and Tractor-Trailer Truck Drivers (SOC 53-3032)	All Occupations
Percent Indicating It is Difficult to Hire	100.0%	83.4%
Reasons for Difficulty in Hiring		
Lack of Experience	65.6%	52.1%
Poor Work History	71.4%	56.4%
Lack of Occupation-Specific Skills	74.9%	55.6%
Failed Background Check	44.3%	22.9%
Wage Demands Too High	32.8%	35.0%
Lack of Required Licenses/Certificates	71.8%	18.7%
Language Barriers	11.1%	2.0%
Not Enough Applicants	84.9%	91.9%
Availability for Shifts Required	21.7%	32.3%
Lack of Required Education	35.0%	14.6%
Overqualified	0.0%	3.7%
Citizenship/Work Authorization	10.6%	5.0%
Other	7.5%	4.1%
Average Annual Openings	11	
Certificate Graduates – Bus and Truck Driver		
Community College	0	
Seeking to Re-Enter the Workforce – In Occupation	0	
Minimum Experience Requirement		
No experience required	17.7%	61.2%
Experience required but less than 1 year	52.1%	18.8%
1 year or more experience required	30.1%	20.0%

Sources: *Valentine Area Survey of Hiring and Training Needs*, *Valentine Area Labor Availability Survey, IPEDS,* United States Department of Education and Labor Market Information, Nebraska Department of Labor

B. Licensed Practical and Licensed Vocational Nurses (29-2061)

Licensed practical and licensed vocation nurses care for ill, injured, or convalescing patients or persons with disabilities in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions and may work under the supervision of a registered nurse. Licensed practical and licensed vocational nurses also are a primary occupation within the health care practitioners and technical workers occupation group, an occupation group with a significant annual gap between job openings and occupation entrants. The mean hourly wage for this occupation in the Valentine area was $20.90 in 2018. As seen in Table 4.2, 100.0 percent of businesses in the Valentine area which hire licensed practical and licensed vocational nurses report that it is difficult to hire workers in this occupation.

Table 4.2 also shows the reasons for difficulty in hiring. The availability of workers is the primary concern. One hundred percent of employers indicate that it is difficult to hire licensed practical and licensed vocational workers due to a lack of applicants and 66.7 percent indicate it is difficult to hire because applicants lack required licenses and certificates. Relatively few employers indicate that it is difficult to hire due to factors such as a lack of experience or occupation-specific skill or a poor work history or wage demands which are “too high.” Further, two-thirds of employers do not require applicants to have work experience and the remaining employers require less than a year of experience.

Data on annual openings and entrants for license practical and licensed vocational nurses indicate a modest deficit of new workers entering the occupation. As seen in Table 4.2, there are 2 annual openings in the Valentine area in this occupation due to net job growth and the replacement of workers. At the same time, there is just 1 graduate each year from the Licensed Practical Nurse Certificate Program at Mid-Plains Community College who would be expected to reside in the Valentine area. Further, the survey of Valentine area households did not identify any former licensed practical or licensed vocational nurses who report an interest in re-entering the workforce.

Findings indicate that there is a need to generate more applicants for open licensed practical nurse or licensed vocational nurse positions, but that there is a modest number of annual openings for such workers. This situation, which might be common among specific health care practitioner occupations in the Valentine area, suggests a need to modestly expand the number of workers joining the occupation. To achieve such a modest expansion, employers in the health care industry should encourage their reliable, but less skilled employees to pursue a certificate program in licensed practical nursing, perhaps through tuition assistance or allowing workers to attend class during work hours. These workers have already shown an attachment to the Valentine area and an interest in working in the health care industry. Relatively high average wages for a high school graduate also should encourage individuals to pursue a certificate.

Table 4.2
Key Findings for the Licensed Practical and Licensed Vocational Nurses Occupation

Occupation	Licensed Practical and Licensed Vocational Nurses (SOC 29-2061)	All Occupations
Percent Indicating It is Difficult to Hire	100.0%	83.4%
Reasons for Difficulty in Hiring		
Lack of Experience	0.0%	52.1%
Poor Work History	0.0%	56.4%
Lack of Occupation-Specific Skills	33.3%	55.6%
Failed Background Check	0.0%	22.9%
Wage Demands Too High	33.3%	35.0%
Lack of Required Licenses/Certificates	66.7%	18.7%
Language Barriers	0.0%	2.0%
Not Enough Applicants	100.0%	91.9%
Availability for Shifts Required	33.3%	32.3%
Lack of Required Education	33.3%	14.6%
Overqualified	0.0%	3.7%
Citizenship/Work Authorization	0.0%	5.0%
Other	33.3%	4.1%
Average Annual Openings	2	
Graduates – Licensed Practical Nursing		
College or Community College	1	
Seeking to Re-Enter the Workforce – In Occupation	0	
Minimum Experience Requirement		
No experience required	66.7%	61.2%
Experience required but less than 1 year	33.3%	18.8%
1 year or more experience required	0.0%	20.0%

Sources: *Valentine Area Survey of Hiring and Training Needs*, *Valentine Area Labor Availability Survey, IPEDS,* United States Department of Education and Labor Market Information, Nebraska Department of Labor

C. Farmworkers, Farm, Ranch and Aquaculture Animals (SOC CODE 45-2093)

Farmworkers, Farm, Ranch and Aquaculture Animals attend to live farm and ranch animals including feeding, watering, cleaning, herding and grazing, and may include examining and maintaining records on animals. This occupation is a key part of the farming, fishing and forestry occupation group, an occupation group with an annual deficit of new workers in the Valentine area. The mean hourly wage for the occupation in the Valentine area was $14.97 in 2018. Survey results indicate that it is challenging to find workers in this occupation. As seen in Table 4.3, 91.3 percent of businesses reported that it is difficult to hire workers in this occupation.

Table 4.3 also shows reasons for difficulty according to Valentine area businesses which hire farmworkers who work with animals. Occupation-specific skills and experience are key issues for this occupation. An above average share of employers report that it is difficult to hire due to applicants who lack occupation-specific skills and sufficient work experience. Fifty-three percent of employers require applicants to have at least one year of experience. Worker availability is another key issue. Eighty-five percent of employers indicate that it is difficult to hire because there are not enough applicants for jobs for farmworkers who work with animals. Further, 9.5 percent of employers indicate that it is difficult to hire due to issues with applicants citizenship and work authorization, which is nearly twice the rate for all occupations in the Valentine area.

There is also a need for new workers in this occupation. Data on annual openings for the farmworkers, farm, ranch and aquaculture animal occupation indicates 15 openings each year due to the replacement of existing workers, as seen in Table 4.3. An estimated 13 high school graduates would be expected to choose work in this occupation on an annual basis, indicating a modest annual deficit of new workers. Further, the survey of Valentine area households found no farmworkers, farm, ranch and aquaculture animals who have an interest in re-entering the workforce.

These findings suggest a need for additional personnel to work with farm and ranch animals in the Valentine area. Local school systems should continue to provide education opportunities and classes for students interested in entering this occupation. Further, incentives should be provided to employers willing to hire inexperienced workers, to help new workers achieve the experience level preferred by most employers. Finally, issues with applicants who lack work authorization might be reduced if there is an increase in legal immigrants moving to the Valentine area.

Table 4.3
Key Findings for Farmworkers, Farm, Ranch and Aquaculture Animals

Occupation	Farmworkers, Farm, Ranch and Aquaculture Animals (SOC 45-2093)	All Occupations
Percent Indicating It is Difficult to Hire	91.3%	83.4%
Reasons for Difficulty in Hiring		
Lack of Experience	55.8%	52.1%
Poor Work History	60.0%	56.4%
Lack of Occupation-Specific Skills	63.3%	55.6%
Failed Background Check	21.1%	22.9%
Wage Demands Too High	28.4%	35.0%
Lack of Required Licenses/Certificates	9.5%	18.7%
Language Barriers	3.2%	2.0%
Not Enough Applicants	85.2%	91.9%
Availability for Shifts Required	9.5%	32.3%
Lack of Required Education	3.2%	14.6%
Overqualified	6.3%	3.7%
Citizenship/Work Authorization	9.5%	5.0%
Other	3.2%	4.1%
Average Annual Openings	15	
Graduates		
High School	13	
Seeking to Re-Enter the Workforce – In Occupation	0	
Minimum Experience Requirement		
No experience required	22.9%	61.2%
Experience required but less than 1 year	23.8%	18.8%
1 year or more experience required	53.4%	20.0%

Sources: *Valentine Area Survey of Hiring and Training Needs*, *Valentine Area Labor Availability Survey, IPEDS,* United States Department of Education and Labor Market Information, Nebraska Department of Labor

D. Welders, Cutters, Solderers and Brazers (SOC CODE 51-4121)

Welders, cutters, solderers and brazers use hand welding, flame cutting, hand soldering or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products. Welders, cutters, solderers and brazers are part of the production occupation group, and welding is a H3 occupation by the Nebraska Department of Labor, meaning it offers higher wage earnings opportunities. The mean hourly wage for the occupation in the Valentine area was $18.16 in 2018. Survey results indicate that it is challenging to find workers in this occupation. As seen in Table 4.4, 100.0 percent of businesses report that it is difficult to hire welders, cutters, solderers and brazers.

Table 4.4 also shows reasons for difficulty according to Valentine area businesses who hire welders, cutters, solderers and brazers. Availability is a significant issue with 100 percent of employers reporting that it is difficult to hire welder, cutters, solderers and brazers due to a lack of applicants and 65.1 reporting that applicants cannot work available shifts. Issues with work authorization also influence the availability of workers. Thirty-one percent of employers indicate that it is difficult to hire due to applicants who lack citizenship and work authorization. This is six times the rate for all occupations. Eighty-four percent of employers report that workers with a poor work history make hiring difficult. Work experience is another concern with 84.4 percent of employers reporting that it is difficult to hire because workers lack experience and 65.0 percent of employers requiring applicants to have work experience, including 31.2 percent requiring at least a year of experience.

Data on annual openings and entrants for the welding occupation show a modest deficit of annual entrants. As seen in Table 4.4, there are an estimated 3 new openings in the welding occupation each year in the Valentine area. At the same time, there would be an estimated 1 new graduate from the Welding Technology/Welder program at Mid-Plains Community College expected to live in the Valentine area every three years. The survey of Valentine area households found no former welders, cutters, solderers and brazers in the area who have an interest in re-entering the workforce.

These findings suggest a need for additional workers with a good work history to enter the welding occupation in the Valentine area. Employers with a need for welders should send less skilled, but reliable workers to seek welding degrees, potentially with tuition support from the state of Nebraska. Existing workers in this occupation also should avoid behaviors which lead to a poor work history. Finally, issues with applicants who lack work authorization might be reduced if there is an increase in legal immigrants moving to the Valentine area.

Table 4.4
Key Findings for the Welders, Cutters, Solderers and Brazers Occupation

Occupation	Welders, Cutters, Solderers and Brazers (SOC 51-4121)	All Occupations
Percent Indicating It is Difficult to Hire	100.0%	83.4%
Reasons for Difficulty in Hiring		
Lack of Experience	84.4%	52.1%
Poor Work History	84.4%	56.4%
Lack of Occupation-Specific Skills	53.2%	55.6%
Failed Background Check	31.2%	22.9%
Wage Demands Too High	50.6%	35.0%
Lack of Required Licenses/Certificates	0.0%	18.7%
Language Barriers	15.6%	2.0%
Not Enough Applicants	100.0%	91.9%
Availability for Shifts Required	65.1%	32.3%
Lack of Required Education	0.0%	14.6%
Overqualified	0.0%	3.7%
Citizenship/Work Authorization	31.2%	5.0%
Other	15.6%	4.1%
Average Annual Openings	3	
Graduates – Welding Technology		
Community College	1 in 3 years	
Seeking to Re-Enter the Workforce – In Occupation	0	
Minimum Experience Requirement		
No experience required	34.9%	61.2%
Experience required but less than 1 year	33.8%	18.8%
1 year or more experience required	31.2%	20.0%

Sources: *Valentine Area Survey of Hiring and Training Needs*, *Valentine Area Labor Availability Survey, IPEDS,* United States Department of Education and Labor Market Information, Nebraska Department of Labor

E. Agricultural Equipment Operators (SOC 45-2091)

Agricultural equipment operators drive and control farm equipment to till soil and to plant, cultivate, and harvest crops and may perform tasks such as crop baling or hay bucking. Agricultural equipment operators are a key part of the farming, fishing and forestry occupation group, an occupation group with an annual deficit of new workers in the Valentine area. The mean hourly wage for agricultural equipment operators was $20.05 in the Valentine area in 2018. As seen in Table 4.5, 100.0 percent of businesses in the Valentine area which hire agricultural equipment operators report that it is difficult to hire workers in this occupation.

Table 4.5 also shows the reasons for difficulty in hiring. The primary issue is availability. Seventy-nine percent of Valentine area employers who hire agricultural equipment operators report that there are an insufficient number of applicants while 39.6 percent report it is difficult to find applicants to work required shifts. Employers are generally satisfied with the skill, experience and work history of applicants, although there is significant concern regarding applicants who cannot pass a background check. Note that nearly 79 percent of employers do not require applicants to have work experience.

Data on annual openings and entrants for agricultural equipment operators are shown in Table 4.5. There is a modest gap between annual openings and entrants. There are 5 openings in this occupation each year in the Valentine area and 4 new entrants. The survey of Valentine area households did not identify any former agricultural equipment operators who report an interest in re-entering the workforce.

These findings suggest a need for additional agricultural equipment operators in the Valentine area, particularly operators who can pass a background check. Employers with a need for agricultural equipment operators should train reliable, but less skilled workers for this occupation. Existing workers in this occupation also should avoid behaviors which lead them to fail a background check.

Table 4.5
Key Findings for Agricultural Equipment Operators

Occupation	Agricultural Equipment Operators (SOC 45-2091)	All Occupations
Percent Indicating It is Difficult to Hire	100.0%	83.4%
Reasons for Difficulty in Hiring		
Lack of Experience	36.4%	52.1%
Poor Work History	36.4%	56.4%
Lack of Occupation-Specific Skills	14.9%	55.6%
Failed Background Check	36.4%	22.9%
Wage Demands Too High	14.9%	35.0%
Lack of Required Licenses/Certificates	0.0%	18.7%
Language Barriers	0.0%	2.0%
Not Enough Applicants	78.6%	91.9%
Availability for Shifts Required	36.0%	32.3%
Lack of Required Education	0.0%	14.6%
Overqualified	0.0%	3.7%
Citizenship/Work Authorization	14.9%	5.0%
Other	0.0%	4.1%
Average Annual Openings	5	
Graduates		
High School	4	
Seeking to Re-Enter the Workforce – In Occupation	0	
Minimum Experience Requirement		
No experience required	78.6%	61.2%
Experience required but less than 1 year	0.0%	18.8%
1 year or more experience required	21.4%	20.0%

Sources: Valentine *Area Survey of Hiring and Training Needs*, *Valentine Area Labor Availability Survey, IPEDS,* United States Department of Education and Labor Market Information, Nebraska Department of Labor